Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): Method for digital filtering of a time-discrete input signal, which has been produced by interpolation of a time-discrete pilot signal, ~~whereby~~ wherein the frequency of the input signal is unequal to the frequency of the pilot signal, the method comprising the steps of:

compressing values of the input signal;

storing the compressed values of the input signal; and

computing ~~and~~ values of an output signal ~~from the~~by digital filtering ~~are computed~~ as a function of the stored values of the input signal originating from various times in the past~~, wherein the values of the input signal are compressed and stored in compressed form~~.

Claim 2 (currently amended): Method according to claim 1, wherein the compressing step comprises compressing the values of the input signal ~~are compressed~~ without any loss.

Claim 3 (currently amended): Method according to claim 1, ~~wherein the values of the input signal are run-length-coded~~further comprising the step of run-length-coding the values of the input signal.

Claim 4 (currently amended): Method according to claim 1, ~~wherein~~ further comprising the step of dividing the values of the input signal ~~are divided~~ into symbol periods ~~(D0-D5)~~, in which a coherent range of memory values of the input signal, which are different from one another, and one coherent range or two coherent ranges of constants of the input signal, which are equal to the preceding value of the input signal, arise in each case, and

wherein the storing step comprises storing only the memory values of the input signal and the total value number of the symbol periods ~~(D0-D5) are stored~~.

Claim 5 (currently amended): Method according to claim 4, ~~wherein~~ further comprising the steps of:

determining, when a specific stored value of the input signal is accessed, ~~it is determined as~~ the stored value as a function of the lengths of stored symbol periods ~~(D0-D5)~~ to which symbol periods ~~(D0-D5)~~ the specific value of the input signal belongs, at which point the specific value of the input signal is located in the symbol period; and

using, dependent on whether the point of the specific value within the symbol period corresponds to a memory value or a constant, a corresponding memory value of the input signal or a reconstructed constant ~~is used~~ as specific value.

Claim 6 (currently amended): Method according to claim 4, ~~wherein~~ further comprising the step of:

inputting the memory values of the different symbol periods ~~(D0-D5) are~~ seamlessly ~~input~~ into a memory.

Claim 7 (currently amended): Method according to claim 1, ~~wherein~~ further comprising the step of dividing the values of the input signal ~~are divided~~ into symbol periods ~~(D0-D5)~~, in which an invariable number of memory values of the input signal, the number of memory values being determined as a function of the order of the interpolation, and one coherent range or two coherent ranges of constants of the input signal arise, ~~whereby~~ wherein the constants are values of the input signal which are equal to the value of the preceding input signal, and

wherein the storing step comprises storing only the stored values and the total value number of the symbol periods ~~(D0-D5) are stored.~~

Claim 8 (currently amended): Method according to claim 7, ~~wherein~~ further comprising the steps of:

determining, when a specific stored value of the input signal is accessed, ~~it is determined~~the stored value as a function of the lengths of stored symbol periods ~~(D0-D5)~~ to which symbol periods ~~(D0-D5)~~ the specific value of the input signal belongs, at which point the specific value of the input signal is located in the symbol period; and

using, dependent on whether the point of the specific value within the symbol period corresponds to a memory value or a constant, a corresponding memory value of the input signal or a reconstructed constant ~~is used~~ as specific value.

Claim 9 (currently amended): Method according to claim 7, ~~wherein~~ further comprising the step of:

inputting the memory values of the different symbol periods ~~(D0-D5) are~~ seamlessly ~~input~~ into a memory.

Claim 10 (currently amended): Method according to claim 1, wherein the storing step comprises storing the values of the input signal ~~are stored~~ in a compressing first-in-first-out memory.

Claim 11 (original): Method according to claim 1, wherein the digital filter is implemented as a comb filter.

Claim 12 (currently amended): Method according to claim 1, ~~wherein~~ further comprising the step of:

producing the input signal ~~is produced~~ by integer or non-integer amount frequency multiplication of the pilot signal.

Claim 13 (original): Method according to claim 1, wherein the digital filtering is an anti-aliasing filtering.

Claim 14 (currently amended): Device for the digital filtering of a time-discrete input signal, comprising:

~~with~~ a synchronizer for ~~production of~~producing the input signal by interpolation of a time-discrete pilot signal, ~~whereby~~ wherein the frequency of the input signal is unequal to the frequency of the pilot signal;

a storing means to compress and store compressed values of the input signal needed in order to compute values of the output signal; and

computing means ~~and the device is equipped in such a manner that it can~~ to compute values of an output signal from values of the input signal originating at various times in the past~~,~~ ~~wherein the device is equipped in such a manner that it can compress and store compressed values of the input signal needed in order to compute values of the output signal~~.